

WHAT IS CLAIMED IS:

- 1 1. A method for securing data, said method comprising:
2 receiving a first password corresponding to a software
3 application;
4 generating a first mask value based on the first
5 password;
6 combining the first mask value with a first encryption
7 key, wherein the first encryption key is derived
8 from a generated key and a known value, the
9 combining resulting in a tied key;
10 receiving a second password corresponding to the
11 software application;
12 generating a second mask value based on the second
13 password;
14 separating a recovered encryption key from the tied
15 key using the second mask value, the recovered
16 encryption key including a recovered generated
17 key and a recovered known value; and
18 encrypting data using the recovered generated key.
- 1 2. The method as described in claim 1 further comprising:
2 encrypting the tied key using a second encryption key,
3 the encrypting resulting in a first encrypted
4 tied key; and
5 returning the first encrypted tied key to the software
6 application.
- 1 3. The method as described in claim 2 further comprising:
2 receiving a second encrypted tied key; and
3 combining the second encrypted tied key with the
4 second encryption key, the combining resulting in
5 a recovered tied key.

- 1 4. The method as described in claim 2 further comprising:
2 determining whether a matched encryption tied key is
3 available corresponding to the second encryption
4 key; and
5 sending the matched encryption tied key to a security
6 module in response to the determination.
- 1 5. The method as described in claim 2 further comprising:
2 determining whether a matched encrypted tied key is
3 available corresponding to the second encryption
4 key; and
5 sending the first password to a security module in
6 response to the determination.
- 1 6. The method as described in claim 1 further comprising:
2 determining whether the recovered known value is
3 correct; and
4 processing a data file based on the determination.
- 1 7. The method as described in claim 6 wherein the
2 processing is selected from the group consisting of
3 encrypting the data file using the recovered generated
4 key and decrypting the data file using the recovered
5 generated key.
- 1 8. An information handling system comprising:
2 one or more processors;
3 a memory accessible by the processors;
4 one or more nonvolatile storage devices accessible by
5 the processors;
6 a hardware security module accessible by the
7 processors;

8 a data security tool for securing data using the
9 hardware security module, the data security tool
10 including:
11 means for receiving a first password corresponding to
12 a software application;
13 means for generating a first mask value based on the
14 first password using the hardware security
15 module;
16 means for combining the first mask value with a first
17 encryption key using the hardware security
18 module, wherein the first encryption key is
19 derived from a generated key and a known value,
20 the combining resulting in a tied key;
21 means for receiving a second password corresponding to
22 the software application;
23 means for generating a second mask value based on the
24 second password using the hardware security
25 module;
26 means for separating a recovered encryption key from
27 the tied key using the second mask value, the
28 recovered encryption key including a recovered
29 generated key and a recovered known value; and
30 means for encrypting data using the recovered
31 generated key.

1 9. The information handling system as described in claim
2 8 further comprising:
3 means for encrypting the tied key using a second
4 encryption key, the encrypting resulting in a
5 first encrypted tied key; and
6 means for returning the first encrypted tied key to
7 the software application.

- 1 10. The information handling system as described in claim
2 9 further comprising:
3 means for receiving a second encrypted tied key; and
4 means for combining the second encrypted tied key with
5 the second encryption key using the hardware
6 security module, the combining resulting in a
7 recovered tied key.
- 1 11. The information handling system as described in claim
2 9 further comprising:
3 means for determining whether a matched encryption
4 tied key is available corresponding to the second
5 encryption key; and
6 means for sending the matched encryption tied key to
7 the hardware security module in response to the
8 determination.
- 1 12. The information handling system as described in claim
2 8 further comprising:
3 means for determining whether the recovered known
4 value is correct; and
5 means for processing a data file corresponding to the
6 determination.
- 1 13. The information handling system as described in claim
2 12 wherein the means for processing is selected from
3 the group consisting of a means for encrypting the
4 data file using the recovered generated key and a
5 means for decrypting the data file using the recovered
6 generated key.

1 14. A computer program product stored in a computer
2 operable media for securing data, said computer
3 program product comprising:
4 means for receiving a first password corresponding to
5 a software application;
6 means for generating a first mask value based on the
7 first password;
8 means for combining the first mask value with a first
9 encryption key, wherein the first encryption key
10 is derived from a generated key and a known
11 value, the combining resulting in a tied key;
12 means for receiving a second password corresponding to
13 the software application;
14 means for generating a second mask value based on the
15 second password;
16 means for separating a recovered encryption key from
17 the tied key using the second mask value, the
18 recovered encryption key including a recovered
19 generated key and a recovered known value; and
20 means for encrypting data using the recovered
21 generated key.

1 15. The computer program product as described in claim 14
2 further comprising:
3 means for encrypting the tied key using a second
4 encryption key, the encrypting resulting in a
5 first encrypted tied key; and
6 means for returning the first encrypted tied key to
7 the software application.

1 16. The computer program product as described in claim 15
2 further comprising:

3 means for receiving a second encrypted tied key; and
4 means for combining the second encrypted tied key with
5 the second encryption key, the combining
6 resulting in a recovered tied key.

1 17. The computer program product as described in claim 15
2 further comprising:

3 means for determining whether a matched encryption
4 tied key is available corresponding to the second
5 encryption key; and
6 means for sending the matched encryption tied key to a
7 security module in response to the determination.

1 18. The computer program product as described in claim 15
2 further comprising:

3 means for determining whether a matched encrypted tied
4 key is available corresponding to the second
5 encryption key; and
6 means for sending the first password to a security
7 module in response to the determination.

1 19. The computer program product as described in claim 14
2 further comprising:

3 means for determining whether the recovered known
4 value is correct; and
5 means for processing a data file corresponding to the
6 determination.

1 20. The computer program product as described in claim 19
2 wherein the means for processing is selected from the
3 group consisting of a means for encrypting the data
4 file using the recovered generated key and a means for

5 decrypting the data file using the recovered generated
6 key.